

## Notulae to the Italian alien vascular flora: 16

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## Abstract

In this contribution, new data concerning the distribution of vascular flora alien to Italy are presented. It includes new records and status changes from casual to naturalized for Italy or for Italian administrative regions. Nomenclatural and distribution updates, published elsewhere, and corrections are provided as supplementary material.

## Keywords

Alien species, floristic data, Italy, nomenclature

## How to contribute

The text for the new records, status changes from casual to naturalized or invasive, exclusions, and confirmations should be submitted electronically to Lorenzo Lastrucci ([lorenzo.lastrucci@unifi.it](mailto:lorenzo.lastrucci@unifi.it)). The corresponding specimen along with its scan or photograph has to be sent to FI Herbarium: Museo di Storia Naturale (Botanica), Sistema Museale di Ateneo, Via G. La Pira 4, 50121 Firenze (Italy). Those texts concerning nomenclatural novelties and typifications (only for accepted names) should be submitted electronically to Gabriele Galasso ([gabriele.galasso@comune.milano.it](mailto:gabriele.galasso@comune.milano.it)). Each text should be within 1,000 characters (spaces included).

## Floristic records

### *Acer negundo* L. (Sapindaceae)

+ (NAT) **SIC:** Palermo (Palermo), Piazza D. Dolci (WGS84: 38.114604°N, 13.350172°E), negli interstizi dei marciapiedi, 32 m, 31 May 2023, *E. Di Gristina* (FI, SAF No. 100119). – Naturalized alien species new for the flora of Sicilia.

Several young individuals have been found in the interstices of the sidewalks. Other plants have been recorded in the city center and residential areas of Palermo (Via C. Lascaris, Via P. Ranzano, Via Marco Polo, Via Contessa Adelasia, and Via Ausonia).

E. Di Gristina, G. Barone

***Achillea filipendulina* Lam. (Asteraceae)**

+ (CAS) **TOS**: Cortona (Arezzo), loc. Riccio (WGS84: 43.222485°N, 12.003922°E), fossi al bordo della strada, 276 m, 8 June 2022, leg. L. Baccheschi, det. L. Baccheschi, C. Angiolini (FI). – Casual alien species new for the flora of Toscana.

L. Baccheschi, C. Angiolini

***Alternanthera pungens* Kunth (Amaranthaceae)**

+ (CAS) **SAR**: Cagliari (Cagliari), Pineta di Su Siccu, zona Bonaria (WGS84: 39.206061°N, 9.124077°E), spontaneizzata nei pressi di alcuni esemplari di *Washingtonia robusta*, 0 m, 25 November 2022, S. Costantini, G. Bacchetta (FI, CAG). – Casual alien species new for the flora of Sardegna.

About ten flowering individuals occur spontaneously in a meadow, occupying an area of approximately 100 m<sup>2</sup>. The species was probably accidentally introduced with garden soil.

S. Costantini, G. Bacchetta

***Anredera cordifolia* (Ten.) Steenis (Basellaceae)**

+ (NAT) **ABR**: Chieti (Chieti), loc. Tricalle (WGS84: 42.367821°N, 14.170778°E), margine stradale, 228 m, 10 June 2021, A. Pica, J. Lupoletti (FI). – Status change from casual to naturalized alien for the flora of Abruzzo.

In Abruzzo, *Anredera cordifolia* is reported as a casual alien for the provinces of Chieti and L’Aquila (Olivieri 2010; Conti et al. 2016). In addition to the above reported locality, covering an area of approximately 20 m<sup>2</sup>, in 2022–2023 we observed two further stable nuclei of nearly 10 m<sup>2</sup> within a radius of 1 km. All three localities are along roadsides in ruderal environments and are in rapid expansion, gradually replacing the native flora over the years.

A. Pica, J. Lupoletti

***Campanula poscharskyana* Degen (Campanulaceae)**

+ (NAT) **PIE**: Cellio con Breia (Vercelli), fraz. Breia, presso la Chiesa di San Giovanni (WGS84: 45.764462°N, 8.307049°E), muretto a secco, 807 m, 23 June 2023, M. Lonati, G. Nota (FI). – Status change from casual to naturalized alien for the flora of Piemonte.

In Piemonte, this species was first recorded in 2020 as a casual alien in the province of Torino (Maglioni and Selvaggi 2020). A new population was found in Breia (Vercelli province), in the Insubrian area, where *Campanula poscharskyana* is widespread and colonizes walls and road margins, even forming dense populations with *Erigeron karvinskianus* DC. We, therefore, propose its status change from casual to naturalized.

M. Lonati, G. Nota

***Celtis occidentalis* L. (Cannabaceae)**

+ (NAT) **LOM**: Milano (Milano), Via del Ricordo, Cimitero dismesso di Crescenzago (WGS84: 45.509488°N, 9.239759°E), boscaglia di neoformazione, 127 m, no exp., 5 May 2023, G. Galasso (MSNM barcodes MSNM52449, MSNM52450); *ibidem* (WGS84: 45.509196°N, 9.239834°E), boscaglia di neoformazione, 127 m, no exp., 4 June 2023, G. Galasso (FI, MSNM barcode MSNM52551). – Status change from casual to naturalized alien for the flora of Lombardia.

Inside the Crescenzago Cemetery, decommissioned and abandoned in the 1960s, *Celtis occidentalis* forms an uneven-aged newly formed forest of *ca.* 4,200 m<sup>2</sup> with regularly fruiting plants.

G. Galasso

***Cryptomeria japonica* (L.f.) D.Don (Cupressaceae)**

+ (CAS) **CAL**: Condofuri (Reggio Calabria), loc. Scafi (WGS84: 38.031610°N, 15.873680°E), impianto di *Pinus* sp. pl. percorso dal fuoco, 1079 m, 9 November 2022, leg. L.M. Manti, det. V.L.A. Lafase, L.M. Manti, C.M. Musarella, G. Spampinato (FI, REGGIO). – Casual alien species new for the flora of Calabria.

The observed individuals derived from seeds of mature plants in the nearby area, used in a garden border for wind protection.

L.M. Manti, V.L.A. Lafase

***Elaeagnus pungens* Thunb. (Elaeagnaceae)**

+ (CAS) **MAR**: Osimo (Ancona), loc. Santo Stefano (WGS84: 43.514864°N, 13.459450°E), vegetazione pioniera in *gully erosion morphology* (profonda morfologia di incisione dovuta a forte erosione superficiale) in area agricola, 143 m, 16 October 2019, leg. G. Mei, det. G. Mei, A. Stinca (FI, Herb. G. Mei). – Casual alien species new for the flora of Marche.

G. Mei, A. Stinca

***Gazania rigens* (L.) Gaertn. (Asteraceae)**

+ (CAS) **MAR**: Grottammare (Ascoli Piceno), Lungomare della Repubblica (WGS84: 42.988611°N, 13.871602°E), margine di aiuola presso il litorale, ca. 3 m, 6 August 2022, N. Olivieri (FI). – Casual alien species new for the flora of Marche.

N. Olivieri

***Glandularia hybrida* (Groenland & Rümpler) G.L.Nesom & Pruski (Verbenaceae)**

+ (CAS) **CAL**: Cirò (Crotone), loc. Palombello, lungo la mulattiera a ca. 700 m dalla strada SP10 (WGS84: 39.372540°N, 17.049235°E), margine di campi, substrato

argilloso, 115 m, 4 July 2022, leg. *G. De Fine*, det. *N.G. Passalacqua* (FI). – Casual alien species new for the flora of Calabria.

N.G. Passalacqua, G. De Fine

***Hesperocyparis glabra* (Sudw.) Bartel (Cupressaceae)**

+ (NAT) **PIE**: Torino (Torino), Parco della Maddalena, sentiero a ovest del Faro della Vittoria (WGS84: 45.031151°N, 7.720302°E), bosco artificiale di conifere, 697 m, 26 December 2022, *S. Pirani, S. Ravetto Enri* (FI). – Naturalized alien species new for the flora of Piemonte.

The Parco della Rimembranza, commonly knowns as Parco della Maddalena, is an artificial plantation dating from the 1920s mainly composed of alien conifers, many of which are successfully reproducing. Some young *Hesperocyparis glabra* trees were observed in a dense group of individuals with varying heights, some of which also carrying mature cones.

S. Pirani, S. Ravetto Enri

***Jasminum nudiflorum* Lindl. (Oleaceae)**

+ (CAS) **TOS**: Fiesole (Firenze), loc. Vincigliata, sotto il castello nei pressi del Parco Avventura (WGS84: 47.792868°N, 11.312394°E), bosco termofilo, 210 m, 12 March 2022, *L. Pinzani* (FI, Herb. *L. Pinzani*). – Casual alien species new for the flora of Toscana.

L. Pinzani

***Kalanchoë × houghtonii* D.B.Ward (Crassulaceae)**

+ (NAT) **SAR**: Pula (Cagliari), loc. Santa Margherita, Via Flumendosa (WGS84: 38.956650°N, 8.966953°E), margini stradali e cunette presso il litorale, depositi alluvionali poligenici, 5 m, 30 September 2023, *A. Lallai, M. Sarigu* (FI, CAG). – Status change from casual to naturalized alien for the flora of Sardegna.

In Sardegna, *Kalanchoë × houghtonii* was introduced as ornamental a long time ago and reported as a casual alien since 2012 (Podda et al. 2012). Its vegetative reproduction mode through leaf propagules (Smith 2020) has allowed it to form stable populations on the edges of roads or in areas showing marked human disturbance.

A. Lallai, M. Sarigu

***Lantana camara* L. subsp. *camara* (Verbenaceae)**

+ (CAS) **TOS**: Siena (Siena), Via G. Gigli (WGS84: 43.314299°N, 11.342025°E), margine stradale, 278 m, 12 September 2022, *T. Fiaschi, E. Fanfarillo* (FI, SIENA). – Casual alien subspecies new for the flora of Toscana.

T. Fiaschi, E. Fanfarillo

***Lonicera fragrantissima* Lindl. & Paxton (Caprifoliaceae)**

+ (CAS) **LOM**: Cassano Magnago (Varese), vasche di laminazione dei torrenti Rile e Tenore (WGS84: 45.64159°N, 8.83220°E), boscaglia ripariale, 240 m, 27 May 2022, *M. Adorni* (FI). – Casual alien species new for the flora of Lombardia.

Only two individuals were found.

M. Adorni

***Lupinus albus* L. subsp. *albus* (Fabaceae)**

+ (NAT) **SIC**: Cefalù (Palermo), C.da San Biagio (WGS84: 38.003835°N, 14.005445°E), uncultivated land, 340 m, 1 May 2023, leg. *G. Domina*, det. *G. Domina*, *E. Di Gristina*, *G. Barone* (FI, SAF No. 100135). – Status change from casual to naturalized alien for the flora of Italy (Sicilia).

*Lupinus albus* subsp. *albus*, actually considered a casual alien (Giardina et al. 2007), has not been commonly cultivated for over thirty years but currently forms stable populations in the basal belt of the Madonie Mountains, in the municipality of Cefalù, in San Biagio, Rocca Stefana, and Sant'Ambrogio.

E. Di Gristina, G. Barone

***Mazus pumilus* (Burm.f.) Steenis (Mazaceae)**

+ (NAT) **TAA**: Trento (Trento), nel parcheggio di Trento Expo (CFCE: 9932/2) (WGS84: 46.063807°N, 11.116756°E), selciato con bolognini, due gruppi di ca. 1 m<sup>2</sup> ciascuno, 192 m, 23 May 2021, *F. Prosser* (FI, ROV No. 80110). – Naturalized alien species new for the flora of Trentino-Alto Adige.

*Mazus pumilus* was found also in Trento (Piazza Duomo, WGS84: 46.067121°N, 11.121309°E, abundant, 5 June 2022), Arco (WGS84: 45.916275°N, 10.879655°E, in one point, 21 May 2023), and in the square of Villa Lagarina (WGS84: 45.917141°N, 11.030945°E, abundant, 25 June 2023).

F. Prosser

***Nicotiana tabacum* L. (Solanaceae)**

+ (CAS) **ABR**: Rocca San Giovanni (Chieti), loc. Piano dei Marchi (WGS84: 42.279444°N, 14.482222°E), bordo di canale asciutto nei pressi di una pineta di impianto artificiale, ca. 105 m, 3 September 2022, *N. Olivieri* (FI). – Casual alien species new for the flora of Abruzzo.

Only one individual of the species, close to flowering was found. The area is partially occupied by an artificial forest of *Pinus halepensis* Mill. subsp. *halepensis*, which was affected by a fire in August 2021.

N. Olivieri

***Parthenocissus tricuspidata* (Siebold & Zucc.) Planch. (Vitaceae)**

+ (CAS) **SAR**: Cagliari (Cagliari), Asse Mediano (WGS84: 39.240395°N, 9.118457°E), margini stradali, 21 m, 2 September 2022, *M. Fois, A. Cuena-Lombraña* (FI, CAG). – Casual alien species new for the flora of Sardegna.

M. Fois, A. Cuena-Lombraña

***Phyllostachys aurea* Carrière ex Rivièrē & C.Rivièrē (Poaceae)**

+ (NAT) **SAR**: Oschiri (Sassari), Rizzolu ‘e Curadore in loc. Pegurone (WGS84: 40.794427°N, 9.050850°E), lungo le sponde del torrente, 277 m, 16 October 2022, *G. Calvia, A. Ruggero* (FI, CAG). – Naturalized alien species new for the flora of Sardegna.

In Sardegna, this species has been confused with *Bambusa vulgaris* Schrad. ex J.C.Wendl., which was reported in several works (Camarda et al. 2016; Galasso et al. 2018; Calvia and Ruggero 2020). More recent surveys from Gallura, Logudoro, Sassarese, Campidano di Cagliari, Sulcis-Iglesiente, and other areas, revealed that all the populations previously attributed to *B. vulgaris* were to be assigned to this species that, at the current state of knowledge, is the only bamboo cultivated and then naturalized on the island.

G. Calvia, A. Ruggero

***Plumbago auriculata* Lam. (Plumbaginaceae)**

+ (NAT) **CAM**: Napoli (Napoli), Centro Direzionale, sottopassaggio di Viale della Costituzione (WGS84: 40.857025°N, 14.284956°E), base dei muri in cemento armato ai margini del piano stradale, in ambiente ombroso e stagionalmente umido, 15 September 2022, *E. Del Guacchio* (FI, NAP). – Status change from casual to naturalized alien for the flora of Campania.

The species has been reported as an alien for a long time in Campania and is now widespread, even in scarcely disturbed environments (Del Guacchio and La Valva 2017). In the above reported locality, it is well represented by a stable and growing population (Stinca et al. 2016; E. Del Guacchio, pers. obs.). It is notable that it thrives better than the individuals cultivated or escaped in the overhanging gardens, especially in summer.

E. Del Guacchio, G. Galasso

***Portulaca umbraticola* Kunth (Portulacaceae)**

+ (CAS) **MAR**: Grottammare (Ascoli Piceno), Lungomare della Repubblica (WGS84: 42.988611°N, 13.871388°E), base di fioriera in cemento, presso il litorale, ca. 3 m, 6 August 2022, *N. Olivieri* (FI). – Casual alien species new for the flora of Marche.

N. Olivieri

***Sedum multiceps* Coss. & Durieu (Crassulaceae)**

+ (CAS) **ABR:** Teramo (Teramo), Via A. De Gasperi (WGS84: 42.662777°N, 13.708055°E), fessure di un muro in cemento presso la strada, ca. 251 m, 21 January 2023, N. Olivieri (FI). – Casual alien species new for the flora of Abruzzo.

N. Olivieri

***Sparaxis bulbifera* (L.) Ker Gawl. (Iridaceae)**

+ (NAT) **ITALIA (SIC):** Cefalù (Palermo), Gibilmana, C.da Colombo (WGS84: 38.002785°N, 14.025698°E), frutteto tradizionale, 590 m, 30 April 2023, G. Domina (FI, SAF No. 100116). – Status change from casual to naturalized alien for the flora of Italy; naturalized alien species new for the flora of Sicilia.

A population of several hundred individuals of *Sparaxis bulbifera* was found among orchards and on uncultivated land.

E. Di Gristina, G. Barone

***Tagetes minuta* L. (Asteraceae)**

+ (CAS) **SAR:** Sanluri (Sud Sardegna), loc. Riu Piras (WGS84: 39.570372°N, 8.909956°E), margini stradali, 146 m, 2 June 2022, F. Mascia, L. Podda, G. Bacchetta (FI, CAG). – Casual alien species new for the flora of Sardegna.

F. Mascia, L. Podda

***Zantedeschia aethiopica* (L.) Spreng. (Araceae)**

+ (NAT) **MOL:** Campomarino (Campobasso), presso la strada SS16 “Adriatica” (WGS84: 41.959166°N, 15.036666°E), area acquitrinosa disturbata, ca. 3 m, 12 April 2023, N. Olivieri (FI). – Naturalized alien species new for the flora of Molise.

Many individuals of the species flower and bear fruit and are, therefore, actively propagating. The infructescences, formed by orange berries that probably attract birds, tend to bend with their peduncle downwards as they ripen, perhaps allowing seeds to be disseminated also by water.

N. Olivieri

**Nomenclatural and distribution updates from other literature sources**

Nomenclatural, status, and distribution updates according to Becherer (1936), Rey (2002), She et al. (2005), Ward (2005), Ezcurra and Daniel (2007), Giardina et al. (2007), Persson (2007), Belyaeva (2009), Banfi and Galasso (2010), Eckenwalder (2010), Licitra and Napoli (2011), Verloove and Sánchez Gullón (2012), Gestri and Peruzzi (2013), Ardenghi and Polani (2016), Murrell and Ponedexter (2016), Del Guacchio and La Valva (2017),

Peruzzi et al. (2017), Turland et al. (2018), Buccheri et al. (2019), Lucas et al. (2019), Mutke et al. (2019), Prosser et al. (2019), Tzvelev and Probatova (2019), Bruschi and Pulverelli (2020), Bugni et al. (2020), Calvia and Ruggero (2020), Levin and Sagun (2021), Nepal and Purintun (2021), Semprini (2021), Wei et al. (2021), Filice and Nicolella (2022), Gubellini (2022), Lazzeri and Palermo (2022), Marchenko and Kuzovkina (2022), Prosser et al. (2022), Sadler et al. (2022), Alessandrini et al. (2023), Antonietti et al. (2023a, 2023b), Applequist (2023), Barone et al. (2023), Buldrini et al. (2023), Capuano and Caruso (2023), Castaldi et al. (2023), Conti et al. (2023a, 2023b), Info Flora (2023 [onwards]), Knapp et al. (2023), Laghi (2023), Lazzeri et al. (2023), Longo et al. (2023a, 2023b), Marcenò et al. (2023), Marfella et al. (2023), Martínez et al. (2023), Nicolella et al. (2023a, 2023b), Palazzolo et al. (2023), POWO (2023a [onwards], 2023b [onwards]), Roma-Marzio et al. (2023), Selvaggi et al. (2023), Smith (2023), Soldano and Minuzzo (2023), Trotta et al. (2023), Weakley et al. (2023), Yang et al. (2023), Zepigi et al. (2023), and corrections to Galasso et al. (2018) and subsequent updates summarised in the Portal to the Flora of Italy (2023) are provided in Suppl. material 1.

G. Galasso, F. Bartolucci

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## Supplementary material I

### Categories concerning the occurrence status of taxa

Authors: Gabriele Galasso, Fabrizio Bartolucci

Data type: pdf

Explanation note: 1. Nomenclatural updates; 2. Note updates; 3. Distribution updates; 4. Synonyms, misapplied or included names.

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